

GEOGRAPHIC INFORMATION SYSTEMS SPECIALIST

Definition:

Under general supervision performs specialized technical and professional work in the development and maintenance of computerized data relative to geographic information system (GIS) functions; performs technical GIS input, editing and system analysis; generates a wide variety of maps and reports; assists other staff and performs related work as required.

Essential Duties and Responsibilities:

The responsibilities and essential duties performed on a frequent and recurring basis by an incumbent include the following:

Operates and maintains a GIS database system.

Generates a variety of computerized maps and other data independently and as requested.

Performs analyses using a variety of applications including ArcView, ARC/INFO, MapObjects, MSAccess, ArcGIS and ARC SDE

Creates and maintains geographic files, makes corrections and updates information from a variety of sources.

Meets with hardware/software vendors regarding GIS equipment.

Evaluates GIS software packages and makes recommendations for new software.

Conducts field studies as needed to gather and verify data.

Interprets information from recorded maps, deeds and related source documents and inputs same using coordinate geometry and digitized or scanning methods.

Attends meetings with consultants, City officials and outside agencies to meet project requirements and resolve concerns/conflicts.

Analyzes GIS related data, writes, reviews and processes various reports and other material.

Assists City departments in the development of custom GIS applications.

Converts data received from internal and external sources to make it usable in the GIS system.

Provides training and assistance to new GIS users.

Operates GIS related computer equipment including printers and plotters.

Drives a vehicle on City business if assigned to Development Services.

Other Duties and Responsibilities:

Performs other projects/tasks as assigned.

Lifts and moves boxes of records and other items weighing 30 pounds or less.

Makes oral and written presentations.

Class Characteristics:

Geographic Information Systems Specialist is a multi-incumbent professional/technical position in the Development Services Department and the Information Technology Division of the Administrative Services Department with duties related to the support of GIS functions as assigned. An incumbent works independently on technical assignments and may provide direction to others performing GIS related work. The position assigned to Development Services additionally generates project area notification labels, letters and related records; assists the public across a counter; assists professional planners and other staff regarding zoning ordinances, application procedures and Planning Commission/City Council actions and has contact with City Council Members and the Planning Commission.

Contacts and Relationships:

A Geographic Information Systems Specialist establishes and maintains contact with staff in the department/division to which assigned and staff in other City departments. Some contact will occur with department heads, the City Manager, GIS related vendors/consultants and other public agencies.

Qualification Guidelines:

The knowledge and abilities which are required to perform the duties and responsibilities of this class are as follows:

Knowledge of:

Principles, practices and techniques of GIS applications, design and data base management.

Other computer applications related to area assigned.

General maintenance of GIS equipment and software.

Practices and trends in planning and land use.

Basic zoning and planning laws and regulations.

Effective methods of making oral and written presentations.

Methods of research, analysis and report writing as they relate to area assigned.

Mathematics as applied to GIS work to include the principles of algebra, geometry, trigonometry and statistics.

English usage, spelling, grammar and punctuation.

Customer service techniques.

AND

Ability to:

Read and interpret maps, plans and related source documents.

Operate GIS related equipment and use GIS related software.

Perform a variety of GIS tasks and activities including data input and map generation.

Understand and carry out oral and written instructions independently.

Research, compile and analyze a variety of GIS related materials.

Handle multiple deadlines and multiple projects.

Communicate effectively orally and in writing.

Compose correspondence and reports.

Establish and maintain effective relationships with those contacted in the course of work.

Operate a personal computer and use applicable software.

Meet the public with courtesy and tact.

A typical way to obtain the knowledge and abilities is as follows:

Education:

Bachelors Degree in Computer Science, Mathematics, Engineering, Geography, Urban Planning, GIS or a related field from an accredited college or university.

AND

Experience:

GIS Specialist assigned to Administrative Services/Information Technology: Two years of recent experience in a GIS related field, preferably with a local municipality and covering a wide variety of GIS applications.

GIS Specialist assigned to Development Services: Two years of public agency/urban planning related experience to include some GIS experience.

Special Requirements Include:

Valid and appropriate California Drivers License and acceptable driving record at time of appointment and throughout employment in this position if assigned to Development Services.

Must be able to work a flexible schedule to accommodate City needs.

Physical Tasks and Working Conditions Include the Following:

GIS Specialist assigned to Administrative Services/Information Technology: Work is performed indoors in an office environment. The incumbent sits for extended periods of time, uses a computer, keyboard and related equipment, stands, walks, reaches, bends, grasps and may lift and move boxes of records and other items weighing 30 pounds or less. The incumbent must be able to meet the physical requirements of the class and have mobility, balance, coordination, vision, hearing and dexterity levels appropriate to the duties to be performed.

GIS Specialist assigned to Development Services: Work is performed indoors in an office environment, at a public counter and outdoors in the field. When work is performed outdoors there may be exposure to the elements. The incumbent drives a vehicle on City business, sits for extended periods of time, uses a computer, keyboard and related equipment, stands, walks, reaches, bends, grasps and may lift and move boxes of records and other items weighing 30 pounds or less. When in the field, the incumbent may walk and stand on slippery/uneven surfaces and slopes. The incumbent must be able to meet the physical requirements of the class and have mobility, balance, coordination, vision, hearing and dexterity levels appropriate to the duties to be performed.

Fair Labor Standards Act Designation: Exempt – Professional – Special Exemption for Computer Software Employees.

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